

9-1-1 Special Projects: NH VIEWW

By Sean Goodwin, Special Projects Administrator

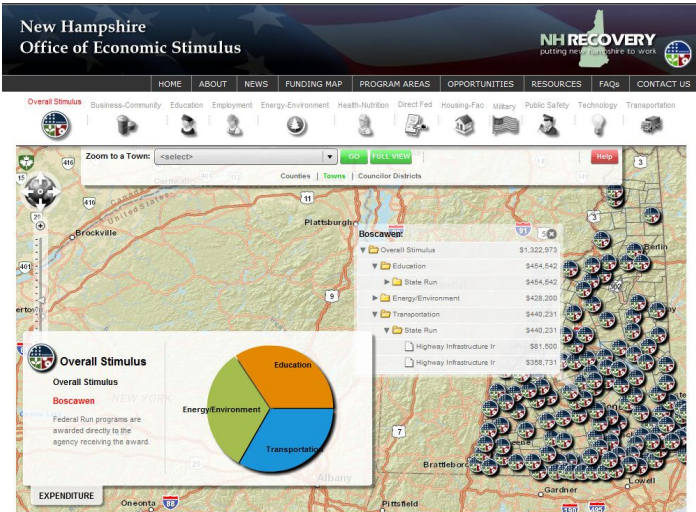
New Hampshire Visual Information and Emergency Watch Web (NHVIEWW) is a web based interactive mapping interface. It leverages the substantial geographic data collected and maintained by the Department of Safety's Emergency Services Division to answer the question "Where?"

The NHVIEWW platform's design allows state agencies to leverage a single hardware and software architecture for efficiency, cost optimization and the ability to manage geographic data in a secure and highly available environment. NHVIEWW contains a secure access internal system and a separate public facing system. To date, this platform has been utilized by the Departments of Safety and Transportation to collaborate and create a road closure database and graphical user interface to enable the accurate collection of and efficient entry of road closure information, a critical need during statewide emergencies. The Department of Health and Human Services has recently become a partner in this platform as well.

The NHVIEWW interface relies on a compilation of GIS servers and sophisticated

workflows to allow authorized users the ability to interact with current and reliable geographic data

many potential uses for state government have become apparent.



in New Hampshire. Additionally, this system is designed to be a user customized common operational picture (COP) and has broken new ground in the development of a true common operating picture. Its primary role is for public safety, emergency planning and response purposes, however,

and functionality in 2014 and 2015. Our future plans include enhancements to the NHVIEWW system to allow secure access to public safety data and GIS tools remotely via tablets and other mobile devices.

Answering the Call

Issue
01

Summer/
Fall

2013



ANSWERING THE CALL

NEW HAMPSHIRE'S SEMI-ANNUAL 9-1-1 & PUBLIC SAFETY NEWS BRIEF



Bruce G. Cheney, Director

NH Enhanced 9-1-1: Then and Now Proud History with a Bright Future

By Bruce G. Cheney, Director

As writers face a blank page and have both the anticipation and anxiety of filling it with hopefully-meaningful content, I have had the challenge and privilege for over twenty years to "write" the 9-1-1 story for the State of New Hampshire following the important, initial efforts of the Seacoast Emergency Medical Service Regional Council along with the State legislature to bring a robust 9-1-1 system to New Hampshire. It was determined that a single point for receiving and routing emergency calls would economically and functionally be the most viable for the State's 13 cities, 222 towns, and 25 unincorporated places (235 total communities). In 1993, there were over 100 dispatch centers in New Hampshire ranging in size and hours of operation. The legislature passed RSA 106-H, effective January 1, 1993, providing the enabling authority for both the Enhanced 9-1-1 Commission and a 9-1-1 system to cover the whole State, providing sole funding through a telephone surcharge

Beginning in February 1993 with myself as the sole employee of the State's 9-1-1 system, we have grown steadily to now over 175 employees staffing six bureaus: Administration, Statewide Telecomm using Voice over Internet Protocol (VoIP), Special Projects, GIS Mapping, Technical Support, and Public Safety Answering Point (PSAP). Our first emergency medical dispatchers (EMD's) were hired in May 1995 and our start date was July 5, 1995. A key distinction for our EMD's would be training to provide pre-hospital medical instruction to callers prior to the

arrival of emergency medical responders. The industry experts predicted a 5-year timespan from start to functioning system with a cost of over \$5M. We "flipped the switch" within three years at a cost of \$4.8M. Not only did we not cut corners, ours was the first PC-based 9-1-1 system in the world. Being on time, under budget and technologically advanced have all been woven into the DNA of our division from those early days and they continue to be driving principles in all we do.

Realizing the critical importance of getting every 9-1-1 call through with clarity and accuracy, we have worked hard to have the very best system possible along with the best-trained professionals. Among our accomplishments, NH became the first-ever state in the country to have a statewide service insuring every person, border to border, had access to 9-1-1 service. In 1999, the NH E9-1-1 system became only the 30th Accredited Center of Excellence by the International Academies of Emergency Dispatch—accomplished by meeting twenty stringent standards insuring quality assurance, oversight, and ethics and we have maintained that accreditation every year since. As of today, only 125 such Accredited Center of Excellence PSAP's exist worldwide. NH 9-1-1 has had two back-to-back EMD of the Year national recognitions awarded to two of our EMD's—Joyce Jastrem and Stephen Harris.

Not content to just maintain, we continue to be part of the national conversation regarding implementation of Next Generation 9-1-1

(NG9-1-1). E9-1-1 Commission Chairman, Chief Douglas Aiken, is a widely-sought-after expert often called upon to testify nationally about areas of radio interoperability and division Assistant Director, Peter DeNutte sits on two national committees tasked with determining national protocols for NG9-1-1. Other division staff members also participate on related NG9-1-1 committees and will play key roles in its implementation.

We continue to provide groundbreaking service for the citizens and visitors to New Hampshire including mapping and GIS services to every community in our State allowing for a very high degree of confidence that when a call comes in, emergency responders receive the correct location to deploy to as quickly as possible. We have mapped expansive snowmobile and ATV trails throughout the North Country providing greatly enhanced safety for those enjoying the great outdoors. Having become the Department of Safety's mapping and GIS experts, we are working with law enforcement to provide accurate

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N.H. Legislative Visit



On May 7, 2013, members of the NH Legislative Criminal Justice and Safety Committee visited the E9-1-1 center at the Incident Planning and Operations Center. Operations Supervisor Karen Whittaker explains how E9-1-1 calls are received and processed.

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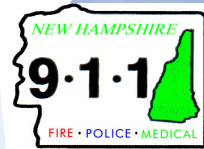
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Training: What does it take?

By David Rivers, Chief of Operations

The road to becoming a 9-1-1 telecommunicator (Telecommunications Specialist I) is a long and challenging one. The first step is the application process, followed by testing, interview, class room and then mentoring with a Certified Training Officer before being allowed to take calls alone.

The whole process begins with Human Resources posting a position on the State website. As applications are received they are checked to insure that the applicant meets all of the prerequisites of the job by the HR staff and added to a register of Certified applicants. Once the Register fills, it is sent to the Bureau's training staff to schedule pre-employment testing.

The testing consists of three pencil and paper tests: the Wunderlich Personnel Test, which measures the problem solving abilities of the candidate; the Comprehensive Personality Profile, which is a job compatibility profile; and the Press test, which assesses reaction times. The three paper based tests are followed by the Criti-Call computer based portion of the testing which insures the applicant has the high level of comprehension and decision making required of a telecommunicator along with the ability to multitask.

Once the testing is completed, the top candidates are invited back for a structured interview. Typically, the interview panel consists of the Chief of Operations, the Operations Supervisor, and the Training Coordinator. After answering the 8-12 questions, each candidate is scored based

on their responses to the interview questions. All of the scores are compiled and compared and those candidates deemed most qualified are offered a position in the training class.

Currently, training consists of 7 weeks of class room training followed by 7-8 weeks of training in the Public Safety Answering Point (PSAP). In the classroom, candidates receive the necessary training to receive all of the required certifications and become familiar with the various software utilized in the PSAP.

Telecommunicators take a weeklong (40 hour) Emergency Medical Dispatcher course culminating in a 50 question multiple choice test. Successful completion of the test results in National Certification as an Emergency Medical Dispatcher. This is one of the foundation classes that enables the telecommunicator to triage calls, assign a response determinant, and provide standardized first aid instructions over the phone until help arrives on scene. During this class room training, the telecommunicator also takes the weeklong Association of Public Safety Communications Officers (APCO) Public Safety Telecommunicator I certification course. The remainder of the class is filled with role playing and various classes such as CPR, First Aid, National Incident Management System (NIMS) that ensure by the time the candidates reach the PSAP they are well versed in all aspects of the job.

After completing the didactic portion of training, the candidates move on to the practical aspect of training where they apply their recently

acquired knowledge base to real world use. Each trainee is assigned to a Certified Training Officer (CTO) and follows their schedule. There is a formal list of expectations that builds as the candidate masters each of the listed skills. Daily feedback is given in the form of a Daily Observation Report (DOR) that is signed by the candidate as well as the CTO. By following this process, the trainee knows on a daily basis where s/he stands.

After the trainee successfully finishes the practical portion of training, s/he goes on their own initially sitting at a calltaking station near the Supervisor's station until all are comfortable with the trainee's ability to process any call that comes into E9-1-1. The Bureau of Emergency Communications typically holds 2-3 classes per year.



STATEWIDE: Emergency Notification System

By Timothy Scott, Database Administrator

The Division of Emergency Services and Communications (DESC) has been the sole provider of 9-1-1 services for the State of New Hampshire since 1995. Over that time period, the DESC has grown through vast changes in 9-1-1, including Enhanced 9-1-1 (E9-1-1), Phase I and Phase II wireless location, telephone number database management and GIS caller location. Given our long history providing emergency services to the citizens of New Hampshire, particularly in regards to cutting-edge technology, when it came time to establish a Statewide Emergency Notification System (ENS), the DESC was chosen as the most logical agency to support this new functionality.

After a period of research and proposals, the DESC selected to partner with Avtex for their CityWatch platform. Our ENS consists of two CityWatch servers located at our Concord

and Laconia locations. These servers are both fully-functional and in the event of an outage at one facility, the other server will be able to continue to function independently. Our ENS is loaded with over a million land line and VoIP telephone numbers, each of which have been "geocoded" or assigned a specific location on the map corresponding to the assigned address. In addition to the data that the DESC owns and maintains, the CityWatch platform provides a public registration page where residents of New Hampshire can create an account and add their cell phone number, text number or email address. This information is automatically added to the system and in the event of an emergency, CityWatch will utilize this additional contact information in addition to the 9-1-1 telephone data.

The power of the CityWatch platform comes from its flexibility in operating in a true statewide environment. The DESC can create users for the system that are geographically bound by their area of jurisdiction. What this means is that the Emergency Management Director from one town cannot accidentally send out an alert to residents of a neighboring town.

The DESC has trained over 200 people from over 50 municipalities and emergency response organizations since establishing the system. Currently, we are making presentations and accepting sign-up sheets from authorized personnel. We have, to date, created over 40 user accounts and will be conducting follow-up training on the use of the system starting in late July.

NH Enhanced 9-1-1: Then and Now

Continued from P. 1

mapping in cruisers, and assisting the Department of Transportation, National Guard, and other State agencies with critical mapping needs, mapping every elementary school, middle school, and high school facility in the State as example.

Having recently begun my sixth appointment as Director and looking both back with fond memories of impressive team accomplishments as well as forward to exciting new trails to blaze, I could not be more proud of the Division of Emergency Services and Communications team and the work that has been accomplished on behalf of New Hampshire's citizens. I believe the history, present mission and future accomplishments of NH's 9-1-1 is an example of what proficient, dedicated teamwork between federal and national agencies and organizations, along with State and municipal government can accomplish when putting excellent customer service and professionalism at the fore. We are poised for NG9-1-1 with the challenges and opportunities that represents for our division and we look forward to tackling it, purposing yet again to be on time, under budget, and technologically advanced.



State Park in Stewartstown on June 15, 2013.

Gov. Maggie Hassan presented Sean Goodwin, E9-1-1 Special Projects Administrator with an award of recognition for his mapping efforts during a ribbon cutting ceremony marking the official opening to 1,000-plus miles of interconnected OHRV and ATV trails throughout the North Country during a ceremony held at Coleman

Dispatch Agencies: CAD Deployment

By Robert Brown, IT Manager

Later this summer, dispatch agencies receiving the Automatic Number Identification/Automatic Location Information (ANI/ALI) data from Enhanced 9-1-1 (E9-1-1) into a Computer Aided Dispatch (CAD) will begin receiving upgrades to several of the supporting systems. These upgrades come in preparation for the eventual Next Generation 9-1-1 (NG9-1-1) and to stay current with industry best practices and standards. The CAD systems original deployment occurred back in 1999 and was offered to all 24 hour dispatch centers acting as a primary dispatch agency for State of NH emergency services. Some of these dispatch agencies already had a CAD system in place and chose to just receive the data into their existing systems others had more specific needs that the State provided system could not satisfy, and the rest welcomed the new system. All took advantage of the opportunity the system provided to enhance the dispatch capabilities and services to citizens and visitors of NH.

All of the agencies will reap the benefits of these planned upgrades whether they use the State-provided Valor system or they just receive the ANI/ALI data via TCP/IP into their respective system. One of these upgrades will be to the network which facilitates the transportation of this data from E9-1-1 to the remote dispatch centers. This will include new routers and new higher bandwidth Carrier over Ethernet (COE) circuits at each location. Coordinating the installation and

testing of these circuits will require the cooperation of the local dispatch agency, Fairpoint Communications, and the E9-1-1 staff. The COE circuits will enable the State to easily increase the bandwidth as the need or demand for more data

data to the local dispatch centers and ideally the first responders.

For those dispatch agencies utilizing the State-provided Valor system, the upgrades will include a new version of the CAD software, map-



transport increases as the NG9-1-1 system develops. Approximately 70% of today's emergency calls come to us via cellular phones and therefore the location data is critical and much of the NG9-1-1 system will be geocentric, and should support future technologies such as, but not limited to, text messaging and video. As more and more information comes into the call center, it will be crucial for the systems in place to deliver that

ping software, and other supporting software, all on an upgraded computer system. This upgrade will bring all software versions to more current vendor supported versions making it much easier for the E9-1-1 staff to maintain the systems.

All of this, of course, is in support of E9-1-1's mission to serve as the communications link between the public and public safety agencies.